Work Order ID 8825 July-31-12 12:45:02 PM	51	*882!	51*		Page 1
Item ID: D412-702-071 Revision ID: LU/R Item Name: Pilot/Co-pilot SI	houlder Harness, 4 point	Accept	*N900040 <i>1</i>	100* Setup	Start *NS1* Stop *NS2*
	•)*)*	Cust Item ID: Customer:	4.	
	: MLT Date: \?\ Date:	SPC (Y/N):	Date:	Run	Start *NR1* Stop *NR2*
	Operation Description	Set Up/ Run Hours	Tool ID Tool #	Plan Accept Re Code Qty Qt	eject Reject Insp. ty Number Stamp
	sion Nbr	Tun nouts			<u>, </u>
IIN-D412-702-3 A					4
DC	DOCUMENT CONTROL Memo	0.00 PAS 16 0.00 9-63	206/24		MC5/2/08/24
Document Control	Photocopy bluefile & type lai	oels per PPPD412-702-071 CHG002 CHG 00	13 PER ECN#12-	595 212-08.02	
110	Pick Kit	0.00			
110 Packaging	Memo	0.00		8 1	2/8/24
Packaging					
					Pho >
120	QC4- 100% Inspect kits for completeness	0.00	2000		
120 QC Quality Control	Memo	0.00	LUCUM		

* * *

NCR:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

	•	•	7
DOA: XXX	Date: /2/04/14		
DUA: JWV	Date: 1 409		<u></u>
" N	•	` }	

										QA Closed:	Date:	ς	
Work Order	: & X	'25	57)		DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	•	
					Rework	vork Skid-tube Crosstube			Crosstube		Water Jet	Engineering	
Part No	D412	-702	-07	1	Scrap		Machining Small Fa			Prod. Eng. Coor. Quality			
					Use-as-is		Thern	noforming	Finishing	Rec/Stor	re/Packaging	Other	
NCR No	D	1 ()	12	1791	Work Order Update	<u> </u>		Large Fab	Composite		Supplier		
	1.	4/											
Root					iption of work order update	1	nitial		tion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector	
Doc/Data	<u>\</u>			1	(A) .a.l. a t		AS 16, 9-6						
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Material	- 15/0,000,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1 VP C	Check DST Chay.	0	57042	7		M	16	652042	
Setup	վ՝	100		_		nl	08/24	(OW)	:	1 5	0-85		
Other	_	<u> </u>		L-(.		1		45-	1 Oratio	80	708/04	12/08/24	
Process	4							ADDOPY "	(vino atom	17.0	11101109		
Supplier	_							Bom.		l /v			
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\ <u> </u>	Bending				Bend	<u> </u>	Grain		<u> </u>	Ovalized		Pressure/Forced	
	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure	
	Cracks				Broken/Damaged		1	ion Incomplete		Part Incorred	· -	Weld	
	Crushed/	Crimped.			Burrs	X	f	ions Incomplete/	Unclear	Part Lost/Mi	issing	Wrong Stock Pulled	
]	Cuffs			Contamination	<u> </u>	Mainte	enance		Part Moved				
<u> </u>	Heat Treat			Countersink		Mislabe	eled		Positioned V	Vrong	7		
				Cut Too Short		Misread	t		Power Loss/	Surge	Other		
Ripples in Bend Drill Holes				Drill Holes		Offset					·····		
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Turning Sequence Finish				Finish		Out of 9	Sequence						
1	W/ave/Tw	ist in Tuk	ne		Folio		Outside	Dimensions					

Work Ord <i>July-31-12</i> 12:		3251	•	,· '	*882	251*					Page
Item ID: Revision ID: Item Name:	D412-702-0 U/R Pilot/Co-pilo	071 of Shoulder Harness, 4 poi	nt		Accept	*N9000	040	100)* s	etup Start Stop	14.71
Start Date: Required Date Reference:	8/08/12 e: 8/08/12	Start Qty: 2.00 Req'd Qty: 2.00	•	ク* ク*		Cust Item II Customer:	D:				
Approvals: Process Plan: Dat		Date:		Tooling: SPC (Y/N):	Date:			R	tun Start Stop	"INK1"	
Sequence ID/ Work Center 130 *130*	ID	Operation Description Packaging			Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp
Packaging Packaging		Memo Identify and Location: PPP Rev:	pack for shippin	ng as per	0.00 PPP D412-702-071			\		•	,

140

QC21- Final Inspection - Work Order Release

0.00

140

Memo

0.00

Quality Control

MUJ 121081CY

Page 2

NCD		,	
NCR:	Yes	/	No

DQA: ____ Date: ____

NCR:	Yes	/ No					WORK ORDER NON-C		NFORM	MANCE / UPI	DATE	QA Closed:	Date:	3
	-					٦			_					
Nork Ord	er:					1	DISPOSITION	1	AGAINST DEPARTMENT/PROCESS ,					
Part I	No.						Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
raiti	Use-as-is Thermoforming						Finishing	4	e/Packaging	Other				
NCR I	No.						Work Order Update			Large Fab	Composite	1100	Supplier	
												- 		
Root Description of work order update						1	nitial		tion	Sign &				
Cause		Date	Step	Qty		0	r Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
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		Centre No	ot Concer	ntric to	o/s		BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	L	Cracks					Broken/Damaged		Inspecti	on Incomplete		Part Incorre	t	Weld
	L	Crushed/0	Crimped.				Burrs	L	Instruct	ions Incomplete/I	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs Contamination					Mainte		<u> </u> _	Part Moved					
	Heat Treat Countersink					Mislabe			Positioned V		7			
	<u> </u>	Inspection		Tube		_	Cut Too Short		Misread	I	L	Power Loss/	Surge	Other
	Ripples in Bend Drill Holes					<u></u>	Offset							
	Torque Waves in Extrusion Drawing				_		-i	Calibration						
	<u> </u>	Turning S	-		ļ	-	Finish		1	Sequence				
		Wave/Tw	ist in Tuk	oe -	ļ		Folio	1	Outside	Dimensions				

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NCD.	Vaa	1	NI.
NCR:	Yes	/	No

MODE ODDED NON CONFORMANCE / LIDDATE

											<i>:</i>		•
											DQA:	Date:	٠,
NCR: Y	es	/ No				WORK ORDER NON-	cor	NFORM	MANCE / UP	DATE	•		3
		•									QA Closed:	Date:	
Work Orde	r·					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	7 ·*
Part N	Part No. NCR No.					Rework Scrap Use-as-is Work Order Update	Machining Small Fab Thermoforming Finishing			Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier		Engineering Quality Other	
Root					Descri	iption of work order update	T	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
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Landin F	_	i				General □ .		1			۱		7- /-
}	-	Bending			_	Bend	-	Grain		<u> </u>	Ovalized	_	Pressure/Forced
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}		Cracks	a :		<u> </u>	Broken/Damaged	-	1	ion Incomplete	-	Part Incorre	<u> </u>	Weld
}		Crushed/	Crimped,			Burrs	<u> </u>	1	ions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs Contamination						-	Mainte			Part Moved		
-	Heat Treat Countersink					-	-	Mislabe			Positioned V		ا ا
}	Inspection Strip in Tube Cut Too Short					-4	-	Misread	d	<u>L</u>	Power Loss/	Surge	Other
	-	Ripples in			<u> </u>	Drill Holes	-	Offset	0.131 43				
	4	Torque W			ⁿ ·	Drawing		1	Calibration	,			
}	_	Turning S			<u> </u>	Finish	_	Out of Sequence					
1		Wave/Tw	ist in Tub	oe e	1	Folio	1	Outside	Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

July-31-12 12:45:02 PM

July-31-12 12:4							*,			
Work Order ID:										
Parent Item:	D412-702-071		•				Start I	Date: 8/08/12		Date: 8/08/12
Parent Item Nam	Pilot/Co-pilot Shoulder Harness,	4 point					Start	Qty: 2.00	Require	d Qty: 2.90 //
NAS1149D0332J Washer	Purchased	No			110	Each	993.0000		28 20	
D _Z			Location	!	Loc Qty		Loc Code			
•			ST297		760					
	•			121708	760				<u> </u>	
			ST298	<u>~</u>	233			02.0		
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				121011	36				//	
NAS1149D0363J Washer	Purchased	No			110	Each	5,617.0000		46/2	
Washer	<i>F</i>		Location		Loc Oty		Loc Code			
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	•			121243	277					-
				121524	215			***************************************		

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NCR:	Yes	1	No

DQA: _____ Date: _____

NCR: Y	es / No				WORK ORDER NON-C	LUINFUR	CIVIAINCE / UF	PUATE	QA Closed:	Date	e: ,
Work Orde	r.				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	•
Part N					Rework Scrap		Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo			······································	Use-as-is Work Order Update	The	Thermoforming Finishing Rec/Store/Packaging Supplier				
Root				Descri	ption of work order update	Initial		ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector
Doc/Data						ļ					
Equip/Tooling	_										
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Landin	ng Gear				General	AULI CAI	LGOKI			<u> </u>	
	Bending				Bend	Grain	1		Ovalized	Γ	Pressure/Forced
ŀ	Centre N	ot Conce	ntric to C)/s	BOM/Route	Hardy		-	Over/Under	tolerance	Temperature/Cure
ŀ	Cracks	or correct		" -	Broken/Damaged	-	ction Incomplete	 	Part Incorre	F	Weld
Ì	⊣	Crimped			Burrs	\vdash	ictions Incomplete	·/Unclear	Part Lost/M	-	Wrong Stock Pulled
f				Contamination	\vdash	tenance	-	Part Moved	· L		
1	Heat Treat			Countersink	Misla			Positioned \			
f	Inspectio		Tube	—	Cut Too Short	Misre			Power Loss/		Other
ļ-	Ripples in				Drill Holes	Offse		<u>L</u>	J *** = * = ****	. J	
ŀ	Torque V		xtrusion	, F	Drawing		f Calibration				
ŀ	Turning S			<u> </u>	Finish		f Sequence			·	
Wave/Twist in Tube					Folio	\vdash	de Dimensions				

July-31-12 12:45:02 PM

Work Order ID:

88251

Parent Item:

D412-702-071

Parent Item Name:

Pilot/Co-pilot Shoulder Harness, 4 point

Purchased

No

Start Date: 8/08/12

Required Date: 8/08/12

Required Qty: 2.00

Start Oty: 2.00 3,710.0000

Location	Loc Oty
316	899
122452	899
ST300	841
117885	32
119017	663
119075	138
121444	8
ST317	1970

122141 1970

110

Each

Loc Code

NCR:	ICR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE																
												QA Closed:	Date				
Vork Ord	Order: DISPOSITION								AGAINST DEPARTMENT/PROCESS .								
Part No.					Rework Scrap Use-as-is		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing			4	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other					
NCR No V				Work Order Update			Large Fab	Composite									
Root					Desci	ript	tion of work order update	1	nitial	Ac	tion	Sign &	···				
Cause		Date	Step	Qty		or	Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector			
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		Centre No	ot Concer	ntric to	o/s	_	BOM/Route [Hardware			Over/Under	tolerance	Temperature/Cure			
	L	Cracks			L	_ [Broken/Damaged	L	Inspection Incomplete			Part Incorre	ct _	Weld			
	L	Crushed/0	Crimped.			_[Burrs		Instruct	nstructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled			
	L	Cuffs			Ĺ	إ_	Contamination		Mainte		_	Part Moved					
	<u>L</u>	Heat Trea	it		L		Countersink		Mislabe	eled		Positioned Wrong					
	L	Inspection		Tube			Cut Too Short		Misread	i		Power Loss/	Surge	Other			
		Ripples in				_	Drill Holes	_	Offset								
	L	Torque W	aves in E	xtrusio	n L	_	Drawing	L	Out of 0	Calibration							
		Turning S	equence		L	_	Finish		Out of 9	Sequence							
	Wave/Twist in Tube				- ļi	Folio		Outside	Dimensions								

Date:

DQA:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART SERVICE INSTRUCTION TO AMEND IIN-D412-702-3 REV. A OR EARLIER

AND ICA-D412-702 REV. 4 OR EARLIER

REF CANADIAN STC: SHOPE REF FAA STC: SR01997NY
REF EASA STC: EASA.IM.R.S.00710
REFERENCE ONLY

1.0 PURPOSE

THE PURPOSE OF THIS DSI IS TO CORRECT THE HARDWARE CALLED OUT IN THE D412-702-071 KIT.

2.0 WEIGHT AND BALANCE

NO CHANGE.

3.0 PARTS LIST

QTY -071	P/N	DESCRIPTION
X	D412-702-071	DART PILOT/CO-PILOT SHOULDER HARNESS KIT
<u></u>	D4305-041	SHOULDER HARNESS
4	AN3-4A	BOLT
1 2	AN4-6A	BOLT
	"AN3-10A"	BOLT
6-6	MS21042L3 7	NUT
4, 2_	-MS21042L4/	NUT
10	"NAS1149D0332J	WASHER
6	NAS1149D0363J	WASHER
Z 4	NAS1149D0432J	*WASHER
C-4.	NAS1149D0463J	WASHER

WAS:

IS:

QTY -071	P/N	DESCRIPTION						
X	D412-702-071	DART PILOT/CO-PILOT SHOULDER HARNESS KIT						
1	D4305-041	SHOULDER HARNESS						
4	AN3-4A	BOLT						
2	AN3-6A	BOLT						
2	AN3-7A	BOLT						
14	NAS1149D0332J	WASHER						
8	NAS1149D0363J	WASHER						
8	MS21042L3	NUT						

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01

> **APPROVED** D. SHEPHE

CERT. NO.: ISSUE NO.:

12.05.01

Α	NEW IS	SUE		RP	12.05.01					
REV.			DESCRIPTION	вү	DATE					
DESIG	N	RP		ROSPACE L						
DRAW	N	RP	HAWKESBURY, ONTARIO, CANADA							
CHECKED Q.P.			DRAWING NO.		REV. A					
MFG. A	PPR.	N/A	DSI 9612		SHEET 1 OF 2					
APPRO	VED	Sep.	TITLE PILOT/CO-	PILOT HARNE	ESS SCALE					
DE API	PR.	-##	UPDATES NTS							
DATE		5.01	THIS DOCUMENT IS PRIVATE AND CONFIDENT	12 BY DART AEROSPACI TIAL AND IS SUPPLIED ON THE EXPRES OPED OR COMMUNICATED TO ANY OTH STONE FOR THE PROSPACE LTD.	S COMPLICIA LIMIT II III					

Status	Item ID	Rev	Name	Chart Data	Number Da	LIONA	Savan N	lauta Cas II	0-4	0	Data Last Man	Otan Data
Status		Lev	name						Sort	Comments	Date Last Mod	Stop Date
	D4305-041	SI	noulder Harness Assembly	3/1/2011	1.0000	Each	0 %	110	1	· @"	3/1/2011 10:	
	AN3-4A	В	olt	3/1/2011	4.0000	Each	0 %	110	2	<u>a</u> :	3/1/2011 10:	
	AN4-6A	В	olt	9/5/2012	2.0000	Each	0 %	110	3	.3."	9/5/2012 2:5	
	AN3-10A	Be	olt	8/24/2012	2.0000	Each	0 %	110	4	<u>a)</u>	9/5/2012 2:5	
	MS21042L3	N	ut	3/1/2011	6.0000	Each	0 %	110	5	<u>a</u> .'	9/5/2012 2:5	
	MS21042L4	N	ut	8/24/2012	2.0000	Each	0 %	110	6	<u>a</u> _	9/5/2012 2:5	
	NAS1149D0332J	W	asher	3/1/2011	10.0000	Each	0 %	110	7	<u>a:</u>	9/5/2012 2:5	
	NAS1149D0363J	W	asher	3/1/2011	6.0000	Each	0 %	110	8	ri i	9/5/2012 2:5	
	NAS1149D0432J	W	ASHER	8/24/2012	4.0000	Each	0 %	110	9	d	9/5/2012 2:5	
	NAS1149D0463J	W	/asher	8/24/2012	4.0000	Each	0 %	110	10	9.1	9/5/2012 2:5	

item*ID: D412-702-071

POM Time			· · · · · · · · · · · · · · · · · · ·	a. 1a.								
Status	Item ID	Rev	Name	Start Date	Juantity Pe	UOM	scrap %	toute Seq II	Sort	Comments	Date Last Mod	Stop Date
	D4305-041		Shoulder Harness Assembly	3/1/2011	1.0000	Each	0 %	110	1	<u>a`</u>	3/1/2011 10:	
	AN3-4A		Bolt	3/1/2011	4.0000	Each	0%	110	2	<u>a)</u>	3/1/2011 10:	
	AN4-6A		Bolt	9/5/2012	2.0000	Each	0 %	110	3	<u>a)</u>	9/5/2012 2:5	
	AN3-10A		Bolt	8/24/2012	2.0000	Each	0 %	110	4	(ف	9/5/2012 2:5	
	MS21042L3		Nut	3/1/2011	6.0000	Each	0 %	110	5	<u>a :</u>	9/5/2012 2:5	
	MS21042L4		Nut	8/24/2012	2.0000	Each	0 %	110	6	d	9/5/2012 2:5	
	NAS1149D0332J		Washer	3/1/2011	10.0000	Each	0 %	110	7	<u>a</u> .	9/5/2012 2:5	
	NAS1149D0363J		Washer	3/1/2011	6.0000	Each	0 %	110	8	ड ै	9/5/2012 2:5	
	NAS1149D0432J		WASHER	8/24/2012	4.0000	Each	0 %	110	9	a j	9/5/2012 2:5	
	NAS1149D0463J		Washer	8/24/2012	4.0000	Each	0 %	110	10	g.)	9/5/2012 2:5	